What is claimed is:

1. An optical semiconductor device comprising:

an optical semiconductor element formed on a semiconductor substrate;

a semiconductor region opposing said optical semiconductor element and essentially surrounding said optical semiconductor element to form walls; and

a buried layer arranged between the walls of said semiconductor region and said optical semiconductor element and formed by vapor phase epitaxy,

wherein a distance between the wall of said semiconductor region and a side wall of said optical semiconductor element is larger in a portion in which a growth rate of the vapor phase epitaxy in a horizontal direction from the side wall of said optical semiconductor element and the wall of said semiconductor region is higher.

2. A device according to claim 1, wherein

said optical semiconductor element has a stacked structure of Group III-V compound semiconductor layers made from In, Ga, Al, P, and As, and

said buried layer is made from semi-insulating InP.

3. A device according to claim 1, wherein said buried layer has a multilayered structure.

4. A device according to claim 1, wherein

said device further comprises an electrode connected to said optical semiconductor element,

said electrode is formed on said semiconductor region via an insulating layer, and

trenches are formed in a portion of said semiconductor region below said electrode and buried with said buried layer.

5. A device according to claim 4, wherein said trenches are wider in a portion in which the growth rate in the horizontal direction from side walls of said trenches is higher.

6. A device according to claim 4, wherein

said optical semiconductor element has a stacked structure of Group III-V compound semiconductor layers made from In, Ga, Al, P, and As, and

said buried layer is made from semi-insulating InP.

7. A device according to claim 4, wherein said buried layer has a multilayered structure.

8. An optical semiconductor device comprising:

a plurality of optical semiconductor elements formed on a semiconductor substrate;

a dummy portion formed in a center of a square at four corners of which said optical semiconductor elements are arranged; and

a buried layer formed by vapor phase epitaxy so as to bury a portion between said optical semiconductor elements and said dummy portion.

9. A device according to claim 8, wherein

said optical semiconductor element has a stacked structure of Group III-V compound semiconductor layers made from In, Ga, Al, P, and As, and

said buried layer is made from semi-insulating InP.

10. A device according to claim 8, wherein said buried layer has a multilayered structure.

11. A device according to claim 1, wherein said buried layer is made from a semi-insulating semiconductor added with a dopant which forms an impurity level in a deep level in a band gap.

12. A method of fabricating an optical semiconductor device, comprising:

the first step of forming an optical semiconductor element on a semiconductor substrate;

the second step of forming a semiconductor region having walls opposing said optical semiconductor element and essentially surrounding said optical semiconductor element; and

the third step of forming a buried layer by vapor phase epitaxy between the walls of said semiconductor region and said optical semiconductor element,

wherein in the second step a distance between the wall of said semiconductor region and a side wall of said optical semiconductor element is larger in a portion in which a growth rate of the vapor phase epitaxy in a horizontal direction from the side wall of said optical semiconductor element and the wall of said semiconductor region is higher.

13. A method according to claim 12, wherein said buried layer is formed by vapor phase epitaxy using one of a chloride-based source gas and a hydride-based source gas.

14. A method according to claim 12, further comprising

the steps of forming trenches in a predetermined region of said semiconductor region before

the third step, said trenches being buried with said buried layer in the third step, and

the step of forming an electrode to be connected to said optical semiconductor element on said trenches via an insulating film.

15. A method according to claim 14, wherein said trenches are wider in a portion in which a growth rate in a horizontal direction from side walls of said trenches is higher.

16. A method according to claim 12, wherein said buried layer is formed by vapor phase epitaxy using one of a chloride-based source gas and a hydride-based source gas.

17. A method of fabricating an optical semiconductor device, comprising the steps of:

forming a plurality of optical semiconductor elements on a semiconductor substrate;

forming a dummy portion in a center of a square at four corners of which said optical semiconductor elements are arranged; and

forming a buried layer by vapor phase epitaxy so as to bury a portion between said optical semiconductor elements and said dummy portion.

18. A method according to claim 17, wherein said buried layer is formed by vapor phase epitaxy using one of a chloride-based source gas and a hydride-based source gas.